

IN THE CLAIMS:

Please amend claims 1, 2, 4-12, 14, 15, 18-21 and 26 as indicated in the following.

Claims Listing:

1. (Currently Amended) A method comprising ~~the steps of~~:
receiving a multiplexed packetized data stream that carries real-time multimedia
programs;
during a first time:
storing a first portion of the packetized data stream representing video data and timing
data of a program;
setting a system time indicator to a stored system time value, wherein the stored system
time value is based on a portion of the timing data of the first portion of the
packetized data stream;
during a second time:
incrementing the system time indicator;
retrieving the video data of the first portion of the packetized data stream for video
decoding; and
storing a second portion of the packetized data stream representing video data and timing
data of the program.
2. (Currently Amended) The method of claim 1, wherein
~~the step of~~ storing the first portion of the packetized data stream includes the first portion
of the packetized data stream representing audio data of the program;
~~the step of~~ storing the second portion of the packetized data stream includes the second
portion of the packetized data stream representing audio data of the program;
the method further including: ~~the step of~~
during the second time:
~~the step of~~ accessing the audio data of the first portion of the packetized data stream for
audio playback.

3. (Original) The method of claim 1, wherein the multiplexed packetized data stream is a multiplexed packetized data stream that substantially meets an MPEG2 specification.

4. (Currently Amended) The method of claim 3, wherein ~~the step of~~ storing the first portion includes storing transport stream packets.

5. (Currently Amended) The method of claim 4, wherein ~~the step of~~ storing the first portion includes: ~~the sub-steps of~~
determining transport stream packets containing data associated with the program; and
storing the transport stream packets containing data associated with the program after the
step of determining.

6. (Currently Amended) The method of claim 3, wherein ~~the step of~~ storing the first portion includes storing packetized elementary stream (PES) packets.

7. (Currently Amended) The method of claim 6, wherein ~~the step of~~ storing the first portion includes: ~~the sub-steps of~~
determining transport stream packets containing data associated with the program; and
storing PES packets based upon the transport stream packets containing data associated
with the program after the step of determining.

8. (Currently Amended) The method of claim 1, wherein ~~the step of~~ storing the first portion of the transport stream includes the timing data including synchronization information used for playing the program back at a real time program bit-rate.

9. (Currently Amended) The method of claim 1, wherein ~~the step of~~ incrementing the system time indicator includes incrementing the system time indicator based upon a signal generated from multiplexed packetized data stream data received after the first time.

10. (Currently Amended) The method of claim 1 further comprising ~~the step of~~:
decoding the video data of the first portion to provide a decoded video stream.

11. (Currently Amended) The method of claim 10, wherein ~~the steps of~~ receiving a multiplexed packetized data stream and decoding the video data are performed by an integrated semiconductor device.

12. (Currently Amended) The method of claim 10 further comprising ~~the step of~~ providing the decoded video stream for display at a play back rate.

13. (Original) The method of claim 12 wherein the play back rate is a real time rate.

14. (Currently Amended) The method of claim 12, wherein ~~the step of~~ providing the decoded video stream for display includes determining the play back rate based upon clock recovery data of the first portion of the transport stream, wherein the play back rate ~~will vary~~varies depending upon a rate at which the first portion of the transport stream data is provided to a decoder during the step of decoding.

15. (Currently Amended) The method of claim 12 wherein ~~the step of~~ providing the decoded video stream for display includes determining the play back rate based upon timing data received from the multiplexed packetized data stream after the first time.

16. (Original) The method of claim 15, wherein the timing data received from the multiplexed packetized data stream after the first time is associated with a current real-time data stream.

17. (Original) The method of claim 12, wherein the play back rate is faster than a real time rate.

18. (Currently Amended) A method comprising ~~the steps of~~:
determining a mode of operation;
during a first mode of operation:
receiving a multiplexed packetized data stream at a first demultiplexer;
selecting a first program from the multiplexed packetized data stream;
decoding a video portion of the first program for display;
during a second mode of operation:
receiving the multiplexed packetized data stream at the first demultiplexer;
selecting the first program from the multiplexed packetized data stream;
storing the first program;
during a third mode of operation:
receiving the multiplexed packetized data stream at the first demultiplexer;
selecting the first program from the multiplexed packetized data stream;
storing a first program portion of the first program;
providing the first program portion to a second demultiplexer;
selecting at the second demultiplexer a video portion of the first program portion;
decoding the video portion of the first program portion for display; and
storing a second program portion of the first program simultaneous to the step of
decoding.

19. (Currently Amended) The method of claim 18, further comprising:
during the third mode of operation ~~the steps of~~:
providing the second program portion to a second demultiplexer;
selecting at the second demultiplexer a video portion of the second program portion; and
decoding the video portion of the second program portion for display.

20. (Currently Amended) The method of claim 18 further comprising: ~~[[,]]~~
during the third mode of operation, ~~the steps of~~:
incrementing a counter associated with the second demultiplexer based upon a signal
generated using a live feed of the multiplexed packetized data stream as it is
received at the first demultiplexer.

21. (Currently Amended) A system comprising:
a first input node to receive a multiplexed packetized data stream that carries real-time multimedia programs;
a first transport stream demultiplexer having an input coupled to the first input node to select packets of data having a predefined packet identifier and an output to provide the select packets of data;
a storage device having a data port coupled to the output of the first transport stream demultiplexer to receive the select packets, wherein the storage device is to store the select packets;
a first clock recovery module having an input coupled to the first input node, and an output, wherein the first clock recovery module is to generate a clock at the output based upon received timing information transmitted in packets of the multiplexed packetized data stream before it is stored in the storage device; and
a decoder having a first input coupled to the output of the first clock recovery ~~system~~ module to receive the clock, a second input coupled the data port of the storage device to receive the select packets, and an output to provide decoded real-time data.

22. (Original) The system of claim 21, wherein the first clock recovery module further generates the clock based upon data transmitted in packets of a currently received multiplexed packetized data stream.

23. (Original) The system of claim 21, wherein the first clock recovery module further generates the clock based upon multiplexed packetized data stream data stored in the storage device.

24. (Original) The system of claim 21, wherein the decoder includes a video decoder.

25. (Original) The system of claim 24, wherein the decoder includes an audio decoder.

26. (Currently Amended) The system of claim 21 further comprising:

a second transport stream demultiplexer having an input coupled to the data port of the storage device.]]

27. (Original) The system of claim 26 further comprising:

a second clock recovery module having an input coupled to the data port of the storage device to allow STC setting based on a stored system time.